UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,542	12/03/2001	Dean E. Thorson	66247	9218

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EXAMINER
LIOU, JONATHAN

ART UNIT	PAPER NUMBER
2663	

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/005,542	THORSON ET AL.
Office Action Summary	Examiner	Art Unit	
	Jonathan Liou	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>03 January 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-18</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1,7,10 and 16</u> is/are rejected.

7)☒ Claim(s) <u>2-6,8,9,11-15,17 and 18</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>03 December 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

This office action is in response to applicant's paper filed 01/03/2006. Claims 1-18 as

amended are currently pending in the application. Applicant has amended claims 4-6,

10, 12-18. Claims 1, 7, 10, and 16 stand rejected. Claims 2-6, 8-9, 11-15, 17-18 are

allowable are objected to.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S.

Pat. No. 5,751,761 to Gilhousen.

3.   As per claim 1, Gilhousen discloses a method of assigning Walsh codes (**see col**

7, lines 13-24, and col 8, lines 40-42.)

Comprising the steps of:

(a) receiving as input a status vector for a Walsh code system of length 2^n;

(Gilhousen teaches that the Walsh code sequence is received as input (col. 15,

lines 40-45), and he also teaches those Walsh code sequences could be the

length 2^n (col. 7, lines 14-27.) Further, the Walsh code is form of vector as shown

in Fig. 2 and col 7, lines 35-59, and it could be interpreted as status vector as

claimed.)

(b) creating a new status vector for a selected Walsh code length of $j=2^{n-k}$ from the status vector. **(Gilhousen shows a new status vectors could be created (see col 7, lines 35-59 and col 48-53.) The length could be vary with any sequences of power of 2 (col 7, lines 35-59.) It could be interpreted as $j=2^{n-k}$ as claimed because while n=1, k=0, j is equal to 1; while n=2, k=1, j is equal to 2; while n=4, k=2, j is equal to 4; and so on (refer to the equations in col 7, lines 35-59))**

(c) creating a search mask for the selected Walsh code length of j;

(d) creating a search sequence fro the selected Walsh code length of j:

(Gilhousen teaches when it is desired to initiate an additional code assignment, a set of potentially assignable codes is identified by searching the list. (see col 11-12, lines 63-9.) This function as taught by Gilhousen could be interpreted as a search mask as claimed. Since it teaches the length table within the cell controller specifying the codes suitable for allocation to channels operative at various data rates, therefore, the length could be j. In addition, table I shows the assignment list table. (col 11-12, 64-65.) By searching the list of Table I, the search sequence for the selected Walsh code could also have length of j.)

(e) searching the search sequence with the search mask to find the next available Walsh code. **(Gilhousen teaches the list would be searched for an available code having a chip length appropriate for the data rate of the requesting channel. (col 12, lines 31-33.))**

4.   As per claim 7, Gilhousen teaches a method of tracking an assignment status of

each Walsh in a Walsh code system (**Gilhousen teaches each Walsh code sequence**

is identified by a Code Label, X/Y, wherein Y represents the length of the code

and X denotes a code number (col 10, lines 53-55.)) The method comprises the step

of:

        (a) receiving as input a status vector, an assignment indicator, a Walsh code

parameter M, and a Walsh code length parameter j wherein M and j are positive

integers; (**Gilhousen teaches that the Walsh code sequence is received as input**

(col. 15, lines 40-45), Walsh assignment code Label with a Walsh code number X

and a Walsh code length Y (col 10, lines 53-55.) Table I shows X/Y are positive

integers.)

        (b) retrieving a bit mask [M, j]; (**Gilhousen teaches assigning X/Y to channels**

(col 11, lines 29-62.))

        (c) updating the status vector as a function of the Walsh code parameter M, the

assignment indicator, and the bit mask [M, j]. (**Gilhousen teaches the code could be**

simultaneously altered to identify other mobile channels. (col 10, lines 22-32.))

New status vector could be as a function of the Walsh code number, the assignment

code, and bit mask X/Y. (**Table I, and col 10-11, lines 48-62.**)

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable

over U.S. Pat. No. 5,751,761 to Gilhousen, and in view of U.S. Pub. 20020146059 to

Kodani et al.

7.   As per claims 10, Gilhousen teaches the functions (a) through (e) as taught for

claim rejection 1 above in the office action. He does not specifically teach a computer

executable program embodied in the medium for causing the computer to perform those

functions.   Nevertheless, Kodani et al. teach the software system in the control unit

(Fig. 1, Kodani et al.). The software system includes Resource Managing sect., which

has Walsh-code managing sect. The Walsh code managing sect. Serves to function to

control order of assignments of Walsh code (sec [0061]-sec [0062], Kodani et al.)

        Since Kodani et al. teaches the software system to perform the Walsh code

managing function and Gilhousen teaches the functions of assigning the Walsh code, it

would have been obvious to one having ordinary skill in the art at the time the invention

was made to have the computer executable program to perform the structure of

Gilhousen in view of Kodani et al. teaching because Gilhousen would require some kind

of computer system to operate his system. Moreover, Gilhousen teaches apparatus

and system of control processor to assign the Walsh codes (col 12 –13, line 66-46,

Gilhousen.)

8.   As per claim 16, the same basis and rationale for claim rejections as applied to

claims 7 and 10.

Response to Arguments

9.   Applicant's arguments filed 1/03/2006 have been fully considered, the objection

and 112 rejections has been withdrawn. However, the 102/103 rejections regarding to

claims 1, 7, 10, and 16 have not been overcome by the applicant's amendment. Thus,

the same ground rejection for claims 1, 7, 10, and 16 stand.

Conclusion

10.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jonathan Liou whose telephone number is 571-272-

8136. The examiner can normally be reached on 8:00AM - 5:00PM Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Jonathan Liou   1/13/2006

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER